

# OFFER FOR IOWANS

## IDENTIFYING INFORMATION

**Offer Identifier:** (H)\_(615)\_(3)F

**Offer Name:** Transforming the Health of Iowans – Board of Regents, State of Iowa

**This offer is for a (pick one):**

☐ new activity

☐ improved existing activity (describe the improvements in your narratives below)

☒ status quo existing activity

**Result(s) Addressed:** Improve the Health of Iowans

### **Participants in the Offer:**

The Board of Regents and the State University of Iowa's Hospitals and Clinics, Psychiatric Hospital, Center for Disabilities and Development, Specialized Child Health Services (SCHS), Primary Health Care, Cancer Registry, Substance Abuse Consortium, and Birth Defects Registry.

### **Person Submitting Offer:**

Gregory S. Nichols, Executive Director of the Board of Regents

### **Contact Information:**

Pamela M. Elliott, Director of Business and Finance

## OFFER DESCRIPTION

University of Iowa Hospital and Clinics – serves as the teaching hospital and comprehensive healthcare center for the State of Iowa, thereby promoting the health of the citizens of Iowa regardless of their ability to pay. The UIHC, in concert with the U of I health sciences colleges, functions in support of health care professionals and organizations in Iowa and other states by: 1) Offering a broad spectrum of clinical services to all patients cared for within the UIHC, including many not commonly available across the state, and through its outreach programs, which occur in over 100 Iowa communities; 2) Serving as the primary teaching hospital for the University to prepare future physicians and other health care professionals for Iowa; and 3) Providing a base for innovative research to improve health care. The UIHC Indigent Patient Care Program is partially funded by an appropriation under Code of Iowa Chapter 255. The UIHC assumes full financial risk for this population of Iowans who are identified by their home counties as having no means to pay for medically necessary care and who do not qualify for other state or federal programs. For an annual fixed appropriation, the UIHC provides transportation, lodging, meals, medical care, social services, care coordination and pharmaceuticals needed to render care throughout the year. The UIHC also assumes full financial risk for the care of state institution patients brought to its facility in Iowa City. There is no appropriation for physician services rendered to these patients. In FY 2004, the Indigent Patient Care Program provided hospital services valued at \$70.3 million and physician services valued at \$30.2 million. Total state appropriations for this program were \$27.4 million and the UIHC assisted in leveraging federal Medicaid dollars that more than offset this cost.

Psychiatric Hospital – provides a full continuum of mental health and substance abuse services including traditional outpatient care, assertive community treatment, partial hospitalization, and tertiary inpatient care with specialties in geriatric psychiatry, eating disorders, and child and adolescent psychiatry, develops new methods for the diagnosis and treatment of psychiatric illness, and serves as an ongoing educational setting for residents and fellows, nurses, and other allied health disciplines. Many of the mental health services are not available to citizens elsewhere in Iowa. As community psychiatric care centers have been developing throughout the state, the Psychiatric Hospital has evolved into a comprehensive referral center for short-term acute psychiatric care in support of these community-based programs as well as the state's mental health institutions. It has developed a program for care of the chronically mentally ill in their home or care facilities (IMPACT Program) and has developed a significant working relationship with the Iowa Department of Corrections that provides leadership for mental health services provided within the Iowa

prison system. The physicians in the Department of Psychiatry and the Carver College of Medicine represent the largest percentage of psychiatrists in the state.

**Center for Disabilities and Development** – The Center for Disabilities and Development, the only resource of its kind in Iowa, receives a state appropriation that provides partial, but essential funding to improve the health, independence, productivity and full community participation of Iowans who have significant disabilities. Through a unique array of comprehensive medical and dental services, training, research, and statewide information and referral resources, the staff and faculty at the Center for Disabilities and Development help Iowans with disabilities lead healthier, more productive lives. Also through consultation to community professionals and technical assistance to public and private agencies regarding Iowa's disability service systems, the Center for Disabilities and Development further enhances the quality of individual lives by increasing family and community capacity to successfully support people with disabilities. During FY 04, residents from each of Iowa's 99 counties benefited from one or more of the Center's programs. Nationally designated by the Administration on Developmental Disabilities (U.S. Department of Health and Human Services) as Iowa's University Center for Excellence on Developmental Disabilities, the Center for Disabilities and Development's interdisciplinary medical programs provide unmatched, state-of-the-art diagnostic, evaluation, and treatment services each year for thousands of Iowans with brain injury, cerebral palsy, developmental delay, spina bifida, mental retardation, swallowing and growth disorders, orthopedic trauma, Down syndrome, self-injury and aggression, sleep disorders, bowel and bladder problems, cognitive and learning concerns, speech and hearing deficits, assistive technology needs, and a host of other complex, life-long disabilities. The range and depth of services provided by the Center's faculty and staff are not found anywhere else in Iowa.

**Specialized Child Health Services** – Provides statewide community-based providers and caregivers consultation and care coordination for Iowa's children and families with specialized health care needs. Programs include statewide childhood cancer treatment service; a statewide rural comprehensive care service for hemophilia patients; and a statewide program to monitor infants at risk of physical and developmental problems. These programs are designed to support family-centered, community-based care.

- **Pediatric-Hematology-Oncology Program**

The statewide childhood cancer treatment services, also known as the Pediatric Hematology-Oncology Program, addresses the challenge of providing state of the art cancer care to Iowa children, including diagnostic and surveillance studies, multidisciplinary curative therapy, community reintegration, long-term preventative follow up to fortunate survivors, and palliative and hospice care to the unfortunate. This complex and ever-changing mission is a challenge under all circumstances, but a much greater one in a rural setting. Indeed, childhood cancer is rare, its therapy is complex and the intensity of its therapy predisposes to frequent life-threatening complications that necessitate immediate intervention. The program has to be flexible enough to accommodate for the dynamic nature of cancer therapy, despite the rural setup where many patients cannot get to the treatment center with the frequency or expediency needed for successful results. For approximately 25 years, the Pediatric Hematology-Oncology Program has created and expanded an oncologic outreach program that has successfully provided such state of the art multidisciplinary cancer care. The outreach program started with the diagnostic, surveillance and therapeutic components, and then extended to school integration. The program benefited 333 patients in FY 00 and as many as 412 in FY 04, and is currently undergoing another major expansion into a comprehensive program for palliative and end-of-life care in partnership with the community caregivers and Hospice. Palliative and end-of-life care has been at best erratic and never integrated in the state of Iowa. These are health care needs that require specialized care in or near home for most efficacy and cost efficiency. The outreach program is unique and well known in the country. It was designed to fulfill the needs of our constituency. With the infrastructure already in place, and the track record, this program is uniquely suited to continue and extend badly needed services.

- **Hemophilia Treatment Center**

The Hemophilia Treatment Center (HTC) at the University of Iowa was established in 1978 by Dr. Thomas Kisker. The HTC was one of the first comprehensive care centers for patients with bleeding disorders in the United States. It is the only HTC center in the state of Iowa officially recognized by the Maternal and Child Health Bureau of the Department of Health and Human Services and the Center for Disease Control (CDC). In 2003 it provided services to 323 patients. The HTC has experienced an average growth rate in patient number of 8% per year over the last 5 years. The majority of patients seen in the center include individuals with hemophilia A or B (factor VIII or IX deficiency), von

Willebrand Disease, platelet disorders, rare clotting factor deficiencies and women with menorrhagia (prolonged menses).

- **Iowa High Risk Infant Follow-up Program**

The Iowa High Risk Infant Follow-Up Program is a service offered to families with infants that were ill as newborns and required special care after birth. The program is based on the recognition of the importance of early identification and treatment of infants at risk for developing disabling conditions. Importantly, as a result of unprecedented improvements in the survival rates of extremely low birth weight infants, infants with severe congenital abnormalities and newborns with other severe perinatal complications, the patient population served by the program has become more medically complex and constitutionally fragile. In addition to providing direct clinical care, the program supports the families and community physicians caring for these very medically fragile infants. A major goal of the program is to provide a package of comprehensive care to the infants and their families and to act as a resource to community care providers.

Primary Health Care –The Primary Care Initiative (PCI) enables the UI Health Sciences Center to fill important gaps in University and state efforts to educate, train, and continuously track health professionals through five individual programs.

- The *Rural Physician Support Program* offers rural Iowa primary care physicians a broad range of medical practice development assistance including recruitment, placement and retention; practice coverage; and practice management.
- The *Iowa Health Professions Inventory* provides Iowa with the only computerized health professions tracking system in the nation. The UI system tracks the changing characteristics, supply, and distribution of Iowa's health professionals.
- The *Department of Family Medicine* uses Primary Care Initiative funding for additional faculty positions devoted to the Department's Predoctoral Teaching Program.
- The *Regional Medical Education Center Grant Program* helps the University cover the administrative and logistical costs of having UI learners in community-based clinical settings. Medical, pharmacy, physician assistant, and other students are continuously rotating to community locations for part of their required clinical experience. Through the six UI Regional Medical Education Centers across the state, learners have access to libraries, computers, interactive television classrooms, didactic teaching, and all-important clinical experience.
- The *Integrated Health Professions Education Program* is a key source of interdisciplinary training experiences for UI health professions students, who otherwise would have little exposure to students in other health disciplines. The five programs within the Primary Care Initiative directly support or complement other operational programs that are educating and training tomorrow's health professions workforce for Iowa.

Cancer Registry – For the years 1973-2003 over 400,000 cancers have been newly diagnosed among Iowans. More than 180,000 Iowans have died from cancer. During 2004, an estimated 15,200 new cancers will be diagnosed in Iowans, and an estimated 6,500 Iowans will die from cancer. Cancer is second to only heart disease as a cause of death in Iowans. In addition to collecting cancer incidence data and providing cancer mortality statistics with death certificate data provided by the Iowa Department of Public Health, the Registry also collects information about the incident cancers, such as address at time of diagnosis and extent of cancer at time of diagnosis, and follows Iowa's cancer patients so that cancer survival can be monitored.

Since 1973, the Iowa Cancer Registry has been a member of the National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) Program. The objectives of the Registry include: 1) collecting data on each Iowan diagnosed with cancer and reporting these data to the NCI, 2) monitoring annual trends in the incidence of cancer among Iowans and the number of deaths related to cancer, 3) monitoring changes over time in prevalence of cancer, trends in therapy, and survival rates, and 4) promoting and conducting research studies designed to assist with cancer prevention and control. Each year the Registry responds to around 300 requests from Iowans for data, analyses, and cancer cluster investigations. The Registry has averaged 9 cancer cluster investigations per year over the last 10 years. The request for these investigations comes from Iowa citizens generally concerned about the health of their neighborhoods. The existence of the Iowa Cancer Registry also allows for the study of the cancer experience of Iowans and focuses national attention and research dollars on this issue. Currently, for every dollar the state of Iowa invests in the Iowa Cancer Registry, approximately \$20.72 of federal funds are returned to Iowa through the core SEER contract.

Cancer is a reportable disease in Iowa, and the Iowa Department of Public Health has designated responsibility for cancer data collection to the Registry. The Registry's database is used to measure the burden of cancer in Iowa and to assess trends in cancer incidence, survival, and mortality. These attributes make it a vital component of the Iowa Consortium for Comprehensive Cancer Control, an organization comprised of over 100 Iowans representing 50 different entities; the primary source of cancer information in the Iowa Department of Public Health's response to House File 726, *The face of CANCER in Iowa* (published in January 2002); and a primary source of cancer information for the Cancer Chapter in *Healthy Iowans 2010 (HI2010)* and the ongoing midcourse review of *HI2010*. The Iowa Cancer Registry benefits Iowans in many ways.

**Substance Abuse Consortium** – The Consortium facilitates multidisciplinary and multi-organizational research and evaluates substance abuse prevention and treatment efforts in the state of Iowa. Research and evaluation efforts involve practitioners in treatment and prevention, state agency representatives, government policymakers, and researchers from institutions of higher education. The Consortium's Advisory Board includes representatives from the University of Iowa, University of Northern Iowa, Iowa State University, state departments of Public Health, Education, Public Safety, Correction and Human Services, and representatives from local substance abuse service agencies. The Consortium is currently housed on the University of Iowa's Oakdale campus. The Consortium continues to attract considerable federal funding for projects in Iowa.

**Iowa Registry for Congenital and Inherited Disorders** - The Iowa Registry for Congenital and Inherited Disorders, formerly the Iowa Birth Defects Registry, was recently renamed per changes in both the state legislative and administrative codes. The name change reflects the expansion of the Registry's mission to include surveillance for both birth defects and selected developmental (childhood) disorders. Since 1983, the Registry has conducted statewide surveillance to monitor the occurrence of birth defects in Iowa. During this time, the Registry has collected information for over 40,000 children with various birth defects. This information has been used by health care providers and educators to provide treatment and support services by various state agencies for program planning, and by researchers to study risk factors for birth defects. The Registry also participates in educational programs designed to help prevent the occurrence and recurrence of birth defects. More recently, the Registry, in collaboration with the Iowa Department of Public Health, has begun a parent notification project. The goals of this project are to notify parents when their child has been identified by the Registry and to offer referrals for the child and family to clinical, educational and social services that they may be eligible for. Most recently, the Registry has started surveillance for Duchenne/Becker muscular dystrophy. This disorder is the most severe form of muscular dystrophy with affecting children at four to five years of age. In addition to statewide surveillance, the Registry will be conducting annual follow-up with Iowa families with one or more children diagnosed with Duchenne/Becker muscular dystrophy to identify clinical and social factors that impact these families. Identification of these factors will facilitate access to care and improved quality of life for patients diagnosed with this disorder.

## **OFFER JUSTIFICATION**

This offer meets all of the Health Team's strategies for improving the health of Iowans. Select examples are offered in support of this assertion, including:

- **All Iowans Have Access to Quality Care** – not only does the UIHC operate the Indigent Patient Care Program and serve all Iowans regardless of their ability to pay, many of the services at the UIHC are nationally recognized by independent sources for their excellence. All necessary care can be received in one comprehensive, seamless location that enables case management to occur. If this patient population did not have access to care via the Indigent Patient Care Program, many would be forced to seek care in emergency departments and/or to forgo care altogether. Counties would also incur additional costs attempting to secure care and providers would experience increases in the uncompensated care they provide.

The Psychiatric Hospital appropriation allows the Department of Psychiatry and the UI Hospitals and Clinics to provide comprehensive psychiatric care to Iowans with mental disorders without regard to their ability to pay. The Department of Psychiatry has faculty members with expertise to care for the most severe psychiatric illnesses, and it serves as a referral source for all other mental health hospitals statewide. The Mental Health Institutes of Iowa and the Community Mental Health Centers in particular utilize the expertise of the University for the complex cases that they cannot manage. Iowans that are approved by their resident county receive inpatient care and partial hospital services at no cost to the individual

through the “Psychiatric State Paper Program.” The Psychiatric State Paper Program likewise covers outpatient diagnostic assessments. All 99 Iowa Counties were served by the Department of Psychiatry in FY 04.

The Center for Disabilities and Development is the only tertiary medical program in Iowa specifically dedicated to the health and well being of children and adults with disabilities. As further demonstration of its uniqueness, it is also home to the state’s only board certified developmental pediatricians and accredited pediatric sleep disorders program. The Center is proud of the fact that a full 96% of the Center’s patients and families would recommend its services to friends and relatives. As a major hospital unit of the UI Hospitals and Clinics, the Center provided over 5,200 team-based outpatient evaluations/treatments through its onsite clinic, mobile outreach service, and statewide telemedicine program in FY 04. As is common for the Center’s patients, over 73% of these individuals were Medicaid recipients.

The Primary Care Initiative is Iowa’s principal source of rural physician recruitment, placement and retention services. The program also uses resident physicians in primary care specialties as a source of practice coverage for rural doctors who are absent for vacation, continuing education, illness or maternity, thus helping retain rural practitioners. Interdisciplinary training of our future health care providers in a range of cultural settings is essential if we are to meet the future needs of an increasingly diverse Iowa population, including specific ethnic groups such as Hispanic immigrant workers, African-Americans and the elderly.

- Improve Preventative Strategies and Health Education –the cutting-edge faculty and staff who practice at the UIHC are committed to patient and practitioner education of preventive strategies. Knowledge is created through research conducted locally as well as accessed through collaborative networks and communicated via patient interaction, brochures, presentations and seminars.

The State of Iowa Cancer Registry continues to promote and conduct research studies designed to assist with cancer prevention and control. Comparing 1994-96 Iowa mortality rates with analogous rates for 2000-02, all cancer causes have decreased 4%, prostate cancer has decreased 19%, female breast cancer 17%, colorectal cancer 5% and lung cancer 4%.

The Iowa Registry for Congenital and Inherited Disorders participates in educational programs designed to help prevent the occurrence and recurrence of birth defects. Using information from Registry surveillance and research activities, Registry faculty and staff annually present lectures around the state and promote awareness about birth defects prevention to students, families, health care workers and multiple agencies.

- Improve Quality of Life – Since 1915 the UIHC has provided coordinated, comprehensive care, without charge to the Indigent Patient Care Program population to meet their needs. Hassles of getting to and returning from visits to care are also eliminated via the free transportation provided. Family members also benefit from less time away from work to assure a relative receives the necessary care because of this transportation service.

Access to effective *psychiatric care* has repeatedly been demonstrated to be cost effective, and to reduce morbidity and mortality in diverse populations. Untreated psychiatric illness is associated with poor quality of life, increased rates of hospitalization and other healthcare utilization of non-psychiatric complaints. The *indirect costs* of all mental illness imposed a nearly \$79 billion loss on the U.S. economy in 1990 (the most recent year for which estimates are available) (Rice & Miller, 1996). Most of that amount (\$63 billion) reflects morbidity costs—the loss of productivity in usual activities because of illness. But indirect costs also include almost \$12 billion in mortality costs (lost productivity due to premature death), and almost \$4 billion in productivity losses for incarcerated individuals and for the time relatives provide family care. These indirect cost estimates are conservative because they do not capture some measure of the pain, suffering, disruption, and reduced productivity that are not reflected in earnings. The fact that morbidity costs comprise about 80 percent of the indirect costs of all mental illness indicates an important characteristic of mental disorders: mortality is relatively low, onset is often at a younger age, and most of the indirect costs are derived from lost or reduced productivity at the workplace, school, and home. The Department of Psychiatry and UIHC are uniquely qualified to provide inpatient care to Iowans receiving Psychiatric State Papers because they have the clinical and programmatic expertise to care for the most severely ill patients.

*The Pediatric Cancer Outreach Program* enables the University of Iowa cancer multi specialty team to evaluate the patient, establish diagnosis and risk factors, define a plan for therapy, prophylaxis and follow up, define the parts that could be implemented at the community level in partnership with the local healthcare providers versus what requires cancer center visits, and educate community caregivers and patients/families. The patient can then return to his/her home town and continue to receive true state of the art care, through this integrated tri-faceted system involving cancer specialists, local caregivers and family units. With such system, patients who receive chemotherapy on a daily to weekly basis, and require as much as twice weekly testing can limit their travels to the cancer center to as often as every 12 weeks, because they undergo testing, chemotherapy, and supportive care including hospitalization for life threatening events in their community hospital. This is achievable only through continuous communications between the University of Iowa Staff, community caregivers and family, a 24/7 open line for consultations, yearly statewide educational seminars, and continuous auditing of the local care.

Over the last 30 years *the Hemophilia Treatment Center (HTC)* has managed to facilitate the shift of the care of patients with hemophilia and other bleeding disorders from the inpatient to the outpatient setting. This has dramatically improved the lifestyle of the patients with fewer visits to emergency rooms and less time away from daily activities. Now, patients, with HTC guidance, are able to infuse their own factor replacement at home, work or school. A study sponsored by the University of Iowa has shown significant improvement in children with hemophilia that are receiving appropriate care.

In the absence of *the Iowa High Risk Infant Follow-Up Program*, the many infants served would have nobody with the time or expertise to deal with their many problems. The parents and community care providers would not have the support of the program available and many of the issues of the care of these infants would “fall through the cracks”. This support includes nutritional counseling and prescription to optimize growth, home oxygen therapy support for those with lung disease associated with their perinatal problems and support for the home use of electronic heart rate and breathing monitors. The oversight and management of medications for hypertension, cardiac, respiratory, and neurological problems is also provided.

*The Primary Care Initiative's* efforts to train health professions students in aspects of primary care as well as to help recruit, place and retain graduates for practice in Iowa communities insures an adequate supply of health professionals to serve Iowans and to attract industry and commerce.

- Mitigate Against Outside Risk Factors – the public health expertise at the UI is committed to identification and mitigation of environmental hazards to health and safety. As an example, the Iowa Registry for Congenital and Inherited Disorders supplies data to the Center for Disease Control and other agencies which facilitate the development of sophisticated analytic methods to better determine genetic and environmental contributions to birth defects.
- Improve the Health Care System – the UIHC serves as a resource for community providers and state agencies across the state by making them better able to function in this complex environment. Not only is consultation provided, the UIHC accepts complicated cases that would tax other providers or exceed their capabilities. Existing providers have access to continuing education programs at the UI and new providers are educated and trained for the Iowa workforce. Researchers at the UI engage in data analysis and experimentation to identify health system improvements.

*The Department of Psychiatry* provides services for care of patients that other hospitals cannot offer and has developed innovative inpatient treatment programs such as specialty units for patients with eating disorders, mood disorders, old age mental disorders and childhood mental disorders. An example of the success of these innovative programs is the Assertive Community Treatment Program at UIHC known as IMPACT. It serves approximately 50 persons with very serious and persistent mental illness. This program has assisted these clients to achieve a greater than 50% decrease in symptoms, a greater than 50% increase in functional abilities and a greater than 60% decrease in the use of inpatient hospital days. In addition, the Department has developed educational programs that are disseminated across the state to bring the highest level of care to Iowans regardless of their ability to pay. For example, the Attorney General as well as the President's New Freedom Commission on Mental Health have identified six evidence-based practices recommended as significant in improving mental health services. The UIHC Department of Psychiatry has assumed a leadership role statewide in the

dissemination of these evidence-based practices to Iowa mental health care providers. More than 900 mental health clinicians statewide have registered for this six session series offered in September and October 2004. The Department also sponsors two joint conferences with the Iowa Psychiatric Society, and supplies CME credit via the Office of Continuing Education. Over 50% of Iowa Psychiatrists attend these programs each year. It also is the only Iowa-based academic training program for psychiatrists, and many of its trainees remain in Iowa to practice. Allied mental health professionals (e.g., social workers, psychologists, physician assistants, and nurses) also receive training through the UIHC.

In FY04, *the Center for Disabilities and Development* made a difference in the future careers of over 200 graduate and post-graduate students who participated in advanced training related to disabilities. Trainees from audiology, medicine, nursing, nutrition, occupational therapy, pediatric dentistry, public health, physical therapy, psychology, recreation therapy, social work, speech-language pathology, and other disciplines not only refined their own clinical skills, but also learned how to collaborate more effectively with colleagues from other disciplines. Such skill enhancement is critical to maintaining quality systems of care for individuals with disabilities, and there is no other place in Iowa where this type of interdisciplinary training takes place.

One of the greatest advantages of *the University of Iowa HTC* is the ongoing active collaboration with the patient's primary care provider (PCP). Unless the patient needs specific care by a University specialist (i.e. surgery), most of the care is performed locally in close collaboration with the HTC. This is essential for the patient's needs due to the rural nature of our state. The HTC collaborates with PCPs in a number of ways: the HTC provides the PCP with a plan for the patient's health care so the patient can be treated for their condition locally; it also offers bleeding disorders education to PCPs and other local health care providers. For example, in the case of children, education is also provided to the patient's school through in-services. Therefore the school is aware of the patient's health status and specific needs. The HTC staff also provides telephone consultations to PCPS and patients as needed with a 24 hour/seven days a week service.

*The Iowa High Risk Infant Follow-Up Program* provides continuing expertise in the care of the medically fragile infants and support to their families and local physicians in order to optimize the infant's long-term outcomes and to minimize the need for further expenditure of resources in their care and support. It is important to keep in mind the tremendous investment of financial and other resources required for the intensive neonatal care of low birth weight and other critically ill newborns. An example is the hospital and medical costs associated with the care of the extremely low birth weight infant, which frequently exceed \$250,000. The high level of care provided that has resulted in the frequent survival of even the very sickest infants is uncommonly available to these infants after their hospital discharge.

*The Primary Care Initiative (PCI)* enables the University to track the changing characteristics, supply, and distribution of Iowa's health professionals. The unique workforce tracking effort is even more valuable at a time when the state and the nation are experiencing shortages in many health disciplines. The Primary Care Initiative has also led to an increase in student instruction in family practice settings. This enhancement of teaching resources substantially contributes to the production of family doctors for Iowa. The PCI appropriations guarantee that UI health professions students will have part of their learning experience in Iowa communities. It also provides a principal source of interdisciplinary training experiences for those students equipping them to serve large numbers of Iowans to prevent, screen, diagnose, refer for follow-up and treat health conditions that have a disproportionate and adverse impact on our minority, rural and elderly populations.

#### Leveraging of Funds

The University of Iowa received almost \$200 million in grants and contracts during FY 2004 from the U.S. Department of Health and Human Services and the National Science Foundation to deal with health related issues. The UIHC annually leverages Medicaid dollars for the Iowa Department of Human Services as part of the Indigent Patient Care Program. Over \$30 million was leveraged in FY 2003 and an expansion of leveraging potential permitted in SF 2298 is anticipated to increase this total by an additional \$13 million pending approval by the Centers for Medicare & Medicaid Services. The Center for Disabilities and Development's state appropriation, clearly vital to its

tertiary health care role, provides an additional dividend by stimulating the acquisition of grants and contracts that allow its staff and faculty to provide technical assistance and community education sessions that are crucial to a wide range of state and community programs and to policy makers. These grants and contracts do not supplant the state appropriation, but instead enhance and expand the Center's programs. Primary beneficiaries of these programs include the Iowa Department of Human Services, Department of Elder Affairs, Department of Public Health, and the Department of Education. However, the Center is actually working with all 19 state agencies named in Governor Vilsack's Executive Order 27 to help them implement the recent Olmstead Supreme Court decision which made non-institutional community options the law of the land. Within the Primary Care Initiative, Regional Medical Education Center Grants of \$178,217 are coupled with Carver College of Medicine funds of \$358,108 (from other sources) for a total of \$536,325, which in combination with nearly \$2.1 million in Statewide Family Practice program appropriations leverages over \$36,000,000 in local health professions education support, a 15:1 ratio. For every dollar the state of Iowa invests in the Iowa Cancer Registry, approximately \$21 of federal funds are returned to Iowa through the core SEER contract.

## **PERFORMANCE MEASUREMENT AND TARGETS**

The increasing number of patients served annually by University of Iowa Hospitals and Clinics, national measures of the quality of care delivered there, and increasing patient satisfaction with the clinical experiences all serve as measures of the excellent services provided. Recent examples of high performance are the top ranking for medical care from *US News and World Report* and the Department of Nursing Services and Patient Care at the University of Iowa Hospitals and Clinics achieving the prestigious MAGNET Designation for Nursing Excellence in January 2004. The UIHC is the first and only hospital in the State to have achieved MAGNET status. This award recognizes the very best in nursing care and is the highest level of recognition that the American Nurses Credentialing Center accords. The UIHC submits quality data to the Centers for Medicare & Medicaid Services, participates in benchmarking with other University HealthSystem Consortium members, participates in the Iowa Hospital Association / Iowa Medical Society quality initiative, and is active in medication safety improvements.

The UIHC recently instituted satisfaction surveys of patients hospitalized on the inpatient psychiatric units. The first quarter of data demonstrate that over 80% of patients rate the inpatient services as very good or excellent. Wellmark surveyed the UIHC's outpatient satisfaction, and it was rated highest among all Wellmark providers in Iowa. As noted above, the UIHC psychiatric services are recognized for their quality of care nationally as well. In the *US News and World Report*, the Department has been ranked among the top 20 programs in the country for the past 3 years, being ranked #17 in 2004. Ongoing psychiatric quality improvement processes are evident via a 60% reduction of total hours of restraints, 49% reduction of total hours of seclusion and a 33% reduction in falls for the geriatric psychiatric population in FY 2004.

The clinical success of the *Center for Disabilities and Development's* neurotrauma rehabilitation service is dramatic with more than 86% of these inpatients being discharged directly to their homes rather than to costly rehabilitation or long-term care facilities, as is typically the case. Nationally, the Center's performance meets or exceeds best practice benchmarks for this patient cohort. As a result, both families and payors realize less overall cost and a more rapid, satisfying healing process. The outcomes achieved by the Center's behavior disorders service are similarly noteworthy. Recognized by academic colleagues and NIH as among the top three programs in the nation for people with mental retardation, this service consistently reduces the incidence of self-injury and aggression by over 50% for more than 92% of its patients through behavioral (e.g. non-medication) interventions alone. Clearly, this helps families and the state by avoiding the need for costly, restrictive institutional placements.

The efficacy of the *outreach cancer program* will be defined by the number of outpatient interventions, tests, and hospital days spent in hometown facilities instead of the University cancer center. For palliative care and end-of-life component, end point measures of success will include the number of therapeutic road maps designed, the success of such road maps as measured by patient satisfaction surveys and the number of children served.

Recently the CDC conducted a study that was published in the prestigious medical journal *Blood* that demonstrated that patients that received comprehensive care at a federally recognized



*Hemophilia Treatment Center (HTC)* experienced lower morbidity and mortality rates than the ones that did not. Thus, morbidity and mortality rates can be used to evaluate success. In addition, thirty years ago hemophiliacs would end their days confined to a wheelchair due to bleeding in the joints. That has changed dramatically with prevention and comprehensive care and today several hemophiliacs are successful examples in sports and academics in their own communities. Looking at functional status of hemophiliacs could be another measure of success.

One important indicator of the quality provided by the *Iowa High Risk Infant Follow-Up Program* comes from recent data from the Vermont Oxford network. This is a network of over 400 centers in the U.S. and abroad that provide data regarding the outcomes of infants under 1500 grams. UIHC participates in an extremely low birth weight (<1000 grams at birth) database of neurodevelopmental outcomes of infants at 2 years of age. Of particular interest are data demonstrating a 61% reduction in extremely low birth weight infants with small head size (microcephaly) at 2 years of age who are followed by the Iowa High Risk Infant Follow-Up Program compared to similar infants followed at other contributing institutions. Based on data at our institution and from other sources in the literature this important reduction is most likely attributable to the excellent nutritional and other post-hospital care provided and supervised by the Iowa High Risk Infant Follow-Up Program.

With respect to the *Primary Care Initiative*, the UI Regional Medical Education Centers have coordinated 1,843 clinical experiences ranging from a half-day to three months for 485 UI medical students, physician assistant students and residents in 153 community-based settings.

*The Rural Physician Support Program*, in a typical year, provides health professions recruitment assistance to approximately 100 Iowa communities in over 75 counties. Since the inception of the program in 1994, primary care residents have provided 471 weeks of practice coverage for rural physicians who are absent from their practices due to vacation, continuing education, illness, or maternity.

Today, the *Iowa Health Professions Inventory* is continuously tracking the practices of over 4,900 physicians, 2,500 pharmacists, 1,400 dentists, 800 advanced practice nurses, and 500 physician assistants.

Through the *Integrated Health Professions Education Project* in the past year, 250 students and over 30 faculty members from medicine, dentistry, nursing, pharmacy, public health and social work have worked together to serve 870 patients, the majority of whom were elderly.

**PRICE AND REVENUE SOURCE**

**Total Price:** \$42,389,000 from the state's general fund

<b>Expense Description</b>	<b>Amount of Expense</b>	<b>FTEs</b>
UIHC, including Indigent Patient Program	652,773,000	
Psychiatric Hospital	18,817,000	
Center for Disabilities and Development	8,843,000	
Specialized Child Health Services	4,848,000	
Primary Health Care	760,000	
Cancer Registry	179,000	
Substance Abuse Consortium	65,000	
Birth Defects Registry	45,000	
<b>Total</b>	686,330,000	

<b>Revenue Description</b>	<b>Amount</b>
State appropriations	42,389,000
Sales and Services	635,419,000
Indirect Costs	3,960,000
Other	4,562,000
<b>Total</b>	686,330,000